

**CLAIMS**

What is claimed is:

1. An apparatus for controlling the operation of a water heater, comprising:  
  
control means, communicatable with said water heater, for engaging and disengaging said water heater;  
  
a programmable timer coupled to said control means for establishing when said control means will engage and disengage said water heater; and  
  
means for powering said programmable timer and said control means.
2. The apparatus stated in claim 1, said control means further comprising:  
  
a solenoid communicatable with a fuel source, and said solenoid actuatable in response to said programmable controller to control the flow of fuel from said fuel source to said water heater.
3. The apparatus stated in claim 1, said powering means further comprising:  
  
a thermopile coupled to said programmable timer and said control means.
4. The apparatus stated in claim 1, said control means further comprising:  
  
an electrical circuit coupled to said programmable timer wherein said electrical circuit opens and closes in response to said programmable timer to control

the operation of said water heater.

5. The apparatus stated in claim 1, wherein said powering means further comprises:

a 110/120 volt electrical power supply coupled to said programmable timer and said control means.

6. An apparatus for programmably controlling the operation of a water heater, comprising:

an actuator adaptable to actuate and de-actuate said water heater; and  
a programmable timer coupled to said actuator for establishing when said actuator actuates and de-actuates said water heater.

7. The apparatus stated in claim 6, further comprising:

a power supply coupled to said actuator and said programmable timer.

8. The apparatus stated in claim 7, further comprising:

a thermopile coupled to said programmable timer and said actuator.

9. The apparatus stated in claim 7, wherein powering means further comprises:

a 110/120 volt power supply coupled to said programmable timer and said control means.

10. The apparatus stated in claim 6, wherein said actuator further comprises:

a solenoid communicatable with a fuel source, and said solenoid actuatable in response to said programmable timer to control the flow of fuel from said fuel source to said water heater.

11. The apparatus stated in claim 6, said actuator further comprising:

an electrical circuit coupled to said programmable timer wherein said electrical circuit opens and closes in response to said programmable timer to control the operation of said water heater.

12. An improved apparatus for controlling the operation of a water heater, wherein said water heater has a holding tank for holding water, a heating source for heating said water in said holding tank, and a fuel supply for supplying said heating source, the improvements comprising:

an actuator for controlling the supply of said fuel to said heating source; and  
a programmable timer coupled to said actuator for actuating and de-actuating said actuator.

13. The improved apparatus stated in claim 12, further comprising:

a thermopile coupled to said programmable timer and said actuator to provide power to said programmable timer and said actuator.

14. The improved apparatus stated in claim 12, further comprising:

a 110/120 volt power supply coupled to said programmable timer and said actuator.

15. The improved apparatus stated in claim 12, further comprising:

said actuator having a solenoid communicatable with the fuel supply and actuating in response to said programmable controller to control the flow of fuel from said fuel supply to said heating source.

16. The improved apparatus stated in claim 12, further comprising:

said actuator having an electrical circuit coupled to said programmable timer wherein said electrical circuit opens and closes in response to said programmable timer to control the operation of said water heater.